

SYE4116: CAPSTONE PROJECT II

Effective Term

Semester A 2024/25

Part I Course Overview

Course Title

Capstone Project II

Subject Code

SYE - Systems Engineering

Course Number

4116

Academic Unit

Systems Engineering (SYE)

College/School

College of Engineering (EG)

Course Duration

Non-standard Duration

Other Course Duration

Normal Track: 2 semesters

Fast Track: 1 semester

Fast track is normally available to students who have completed all other courses of the degree study. It requires the approval of the supervisor, course leader of the Capstone Projects and Major Leader.

Other Track: 1 semester + 1 summer term or 1 summer term + 1 semester

This is mainly for students who have participated in academic exchange programmes in the preceding semester. It requires the approval of the supervisor, course leader of the Capstone Projects and Programme Leader.

Credit Units

0-6

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

ADSE3116 or SYE3116 Capstone Project I with B+ grade and above

Precursors

Nil

Equivalent Courses

ADSE4068 Final Year Project / ADSE4068C Final Year Project / ADSE4116 Capstone Project II / SYE4068 Final Year Project / SYE4068C Final Year Project

Exclusive Courses

Nil

Part II Course Details**Abstract**

In this course, each student will engage in a challenging opportunity to integrate, apply and extend the knowledge gained from the various courses of his/her major study and embark on the second leg of a course of discovery and innovation through an individually guided capstone project. Specifically, the student will implement the capstone project proposed in SYE3116 Capstone Project I.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Develop the methodology and implementation plan to carry out the capstone project proposed in SYE3116.	30	x	x	x
2	Apply and extend the theories and knowledge learned in the major study through the methodical implementation of the proposed capstone project.	50	x	x	x
3	Communicate in writing and oral presentation, the project process, experience and results.	20		x	

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	T1	Each student shall develop an action plan for the proposed capstone project.	1	
2	T2	Each student shall carry out the capstone project action plan with regular consultation with the supervisor.	2	

3	T3	Each student shall write and present a scholarly paper on the result of the capstone project.	3	
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Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Continuous assessment Regular progress meetings with supervisor to discuss Capstone Project status and report writing	1, 2, 3	50	
2	Publishable scholarly written paper Write and present a scholarly paper on the result of the Capstone Project.	3	40	
3	Oral presentation Present the key achievements of the Capstone Project.	3	10	

Continuous Assessment (%)

100

Examination (%)

0

Assessment Rubrics (AR)**Assessment Task**

Coursework

Criterion

Continuous assessment by supervisor and capstone project report

Publishable scholarly written paper

Oral presentation

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

The course is flexible, and has no specific syllabus.

Reading List

Compulsory Readings

Title	
1	Nil

Additional Readings

Title	
1	Nil